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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/571,473	03/13/2006	Shinsuke Nakamura	Q93732	7790
23373 7590 07/22/2008 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
FISCHER, JUSTIN R				
ART UNIT		PAPER NUMBER		
1791				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/571,473

Applicant(s)

NAKAMURA, SHINSUKE

Examiner

Justin R. Fischer

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/02)
Paper No(s)/Mail Date 032508
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 13, 2008 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isobe (JP 9-58227). As best depicted in Figure 1, Isobe teaches a pneumatic tire construction including a polygonal bead core 3. Figure 1 further depicts an assembly in which the interference (radial distance between tire and phantom rim line 22) at the third base point is greater than the interference at the second base point. Based on the general disclosure of Isobe, one of ordinary skill in the art at the time of the invention would have found it obvious to form a tire such that the interference at the third base point is between 10 and 30% greater than the interference at the second base point as such a structure is generally depicted by the reference and applicant has not provided a

conclusive showing of unexpected results to establish a criticality for the claimed relationship. It is further noted that while the figures are not described as “working drawings”, they expressly depict an arrangement in which the interference at the third base point is larger than the interference at the second base point and the claimed relationship appears to be consistent with the general disclosure of Isobe.

In regards to the first tapered portion, Figure 1 depicts a structure in which the respective taper angles are approximately the same (rim line and tire line are substantially overlapped).

Also, with respect to the independent claim, the maximum displacement point is present at the axially innermost end of segment 4c. It appears from the figures that such a point is approximately positioned inward of the third base point by a distance approximately equal to 25% of the width of the bead core. It is further noted that the exact separation does not appear to be critical to Isobe and the reference generally depicts a structure in which the claimed quantitative relationship is approximately satisfied. Lastly, the dimensions and separation of tire components are commonly described in terms of a range of values and given the general disclosure/depiction of Isobe, one of ordinary skill in the art at the time of the invention would have found it obvious to form a tire satisfying the claimed quantitative relationship.

Lastly, regarding independent claim 1 and dependent claims 2-8, the claims are directed to a tire construction and not a wheel assembly comprising a tire and a rim. Thus, any measurements or characteristics in relation to the tire rim do not further define the structure of the claimed tire article. In such an instance, the tire must simply

be capable of being mounted on a rim and define the claimed relationships. It is suggested that applicant amend the claims to define a wheel assembly in order to clearly define the scope of the claimed invention.

With respect to claims 2-4, the maximum displacement point (as depicted in Figure 1) is located at the inward end of segment 4c. The relationship between the angle of segment 4c and the taper angle of the rim bead seat does not further define the claimed tire construction as it relies on the characteristics of the rim construction (separate from the claimed tire construction).

As to claim 5, the location of the maximum displacement point is a direct function of the rim construction and thus, the claimed limitations do not further define the claimed tire construction. The tire of Isobe is capable of being mounted on a rim such that the claimed relationships are satisfied.

With respect to claim 6, the claimed relationship between interference values is a direct function of the rim construction and thus, the claimed limitations do not further define the claimed tire construction. The tire of Isobe is capable of being mounted on a rim such that the claimed relationships are satisfied.

Regarding claims 7 and 8, the claim language pertains to the characteristics of the rim and thus, the limitations do not further define the structure of the claimed tire article.

Conclusion

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Justin Fischer
/Justin R Fischer/
Primary Examiner, Art Unit 1791